

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



1600

RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

4 <110> APPLICANT: SHAO, Wei et al.
 6 <120> TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
 7 NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
 8 AND USES THEREOF
 10 <130> FILE REFERENCE: CL001163
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/804,472A
 C--> 12 <141> CURRENT FILING DATE: 2001-03-13

12 <160> NUMBER OF SEQ ID NOS: 72
 14 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 3625
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Homo sapiens
 21 <400> SEQUENCE: 1

ENTERED

```

22 gaaccagtt gcttcagcga gtcgaactac agttttaacc tcatcaaata tggcatctcc 60
23 cttgcttgct gcagcaggga tggaagaaat gtcactttct ttttaagcta gcaagctttt 120
24 tctttttctt tttcttcttc tatttaaaaa ttctaatacat ggatgcttct tccgaccctt 180
25 atttgcctta tgacggggga ggagacaata ttcccctgag ggaattacat aaaagaggaa 240
26 ctcatatac aatgacaaat ggaggcagca ttaacagttc tacacattta ctggatcttt 300
27 tggatgaacc aattccaggt gttggtacat atgatgattt ccatactatt gattgggtgc 360
28 gagaaaaatg taaagacaga gaaaggcata gacggatcaa cagcaaaaag aaagaatcag 420
29 catgggaaat gacaaaaagt ttgtatgatg cgtggtcagg atggctagta gtaacactaa 480
30 caggattggc atcaggggca ctggccggat taatagacat tgctgccgat tggatgactg 540
31 acctaaagga gggcatttgc cttagtgcgt tgtggtacaa ccacgaacag tgctgttggg 600
32 gatctaataa aacaacattt gaagagaggg ataaatgtcc acagtggaaa acatgggcag 660
33 aattaatcat aggtcaagca gagggtcctg gttcttatat catgaactac ataattgaca 720
34 tcttctgggc cttgagtttt gcctttcttg cagtttccct ggtaaaggta tttgctccat 780
35 atgcctgtgg ctctggaatt ccagagatta aaactatttt aagtggattc atcatcagag 840
36 gttacttggg aaaaatggact ttaatgatta aaaccatcac attagtcctg gctgtggcat 900
37 caggtttgag tttaggaaaa gaaggtcccc tggatcatgt tgctgttgc tgcggaaata 960
38 tcttttccta cctctttcca aagtatatga caaacgaagc taaaaaaagg gaggtgctat 1020
39 cagctgcctc agctgcaggg gtttctgtag cttttggtgc accaattgga ggagttcttt 1080
40 tttagcctga agaggttagc tattattttc ctctcaaaac tttatggaga tcattttttg 1140
41 ctgctttagt ggctgcattt gttttgaggt ccatcaatcc atttggtaac agccgtcttg 1200
42 tcttttttta tgtggagtat catacaccat ggtacccttt tgaactgttt cctttttattc 1260
43 ttctaggggt atttggaggg ctttggggag cctttttcat tagggcaaat attgcctggg 1320
44 gtcgtcgacg caagtccacg aaatttggaa agtatcccgt tctggaagtc attattgttg 1380
45 cagccattac tgctgtgata gccttcctta atccatacac taggctaaac accagtgaac 1440
46 tgatcaaaga gctttttaca gactgtgggc ccctggaatc ctcttctctt tgtgactaca 1500
47 gaaatgacat gaatgccagt aaaattgtcg atgacattcc tgatcgtcca gcaggcattg 1560
48 gagtatattc agctatatgg cagttatgcc tggcactcat atttaaaatc ataattgacag 1620
49 tattcacttt tggcatcaag gttccatcag gcttgttcat ccccagcatg gccattggag 1680
50 cgatcgacg aaggattgtg gggattgcgg tggagcagct tgcctactat caccacgact 1740

```

RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

```

51 ggtttatctt taaggagtgg tgtgaggtcg gggctgattg cattacacct ggcctttatg 1800
52 ccatggttgg tgctgctgca tgcttaggtg gtgtgacaag aatgactgtc tccctgggtg 1860
53 ttattgtttt tgagcttact ggaggcttgg aatatattgt tccccttatg gctgcagtca 1920
54 tgaccagtaa atgggttga gatgcctttg gcagggaagg catttatgaa gcacacatcc 1980
55 gattaaatgg ataccctttc ttggatgcaa aagaagaatt cactcatacc accctggctg 2040
56 ctgacgttat gagacctcga aggaatgata ctcccttagc tgccttgaca caggacaata 2100
57 tgacagtga tgatatagaa aacatgatta atgaaaccag ctacaatgga tttcctgtca 2160
58 taatgtcaaa agaatctcag agattagtgg gatttgcctt cagaagagac ctgacaattg 2220
59 caatagaaa tgccaggaaa aaacaagaag gtatcgttgg cagttctcgg gtgtgttttg 2280
60 cacagcacac cccatctctt ccagcagaaa gtcctcggcc attgaagctt cgaagcattc 2340
61 ttgacatgag cctttttaca gtgacagacc acaccccaat ggagattgtg gtggatattt 2400
62 tccgaaaagct gggactgagg cagtgccttg taactcacia tgggcgcctc cttggcatta 2460
63 taacaaaaaa agatatcttc cgccatattg cccagacggc aaaccaagac cccgcttcaa 2520
64 taatgttcaa ctgaatctca cagatgagga gagagaagaa acggaagagg aagttttatt 2580
65 gttgaatagc acaactcttt aacctgaggg agtcatctac ttttttttcc tcctttacaa 2640
66 aaaaagaaa gaaatataaa agccggggtt ttgcaacatg gtttgcaaat aatgctggtg 2700
67 gaatggagga gttgtttggg gagggaaagg agagagaagg aaaggagtga ggtatttccc 2760
68 gtctaacaga aagcagcgta tcaactccta ttgttctgca ctggatgcat tcagctgagg 2820
69 atgtgcctga tagtgacggc ttgcgctca acagagatga cagcagagtc ctcgagcacc 2880
70 tggcctgttg ctccaacatt gcaaaagacac attatcagtc cctattttcta gagggattac 2940
71 tttgaattga gccatctata aaactgcaag gtcttgccct tttttttaat caaaaactgtt 3000
72 ctgtttaatt catgaattgt atagttaagc attacctttc tacattccag aagagccttt 3060
73 atttctctct ctctctctct ctctctctct ctctctactg agctgtaaca aagcctcttt 3120
74 aaatcggtgt atccttttga agcagtcctt tctcatattg agatgtactg tgattttact 3180
75 gaggtttcat cacaagaagg gagtgtttct tgtgccatta accatgtagt ttgtaccatc 3240
76 actaaatgct tggaacagta cacatgcacc acaacaaagg ctcatacaac aggtaaaagtc 3300
77 tcgaaggaag cgagaacgaa atctctcatt gtgtgccgtg tggctcaaaa ccgaaaaacaa 3360
78 tgaagcttgg ttttaaagga taaagttttc ttttttgttt tcctctcaga ctttatggat 3420
79 aatgtgaccg ggtcttatgc aaattttcta tttctaaaac tactactatg atatacaagt 3480
80 gctgttgagc ataattaaat aaaatgctgc tgctttgaca gtaaaagagaa aaaaaaaaaa 3540
81 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3600
82 aaaaaaaaaa aaaaaaaaaa aaaaaa 3625

```

84 <210> SEQ ID NO: 2

85 <211> LENGTH: 791

86 <212> TYPE: PRT

87 <213> ORGANISM: Homo sapiens

89 <400> SEQUENCE: 2

```

90 Met Asp Ala Ser Ser Asp Pro Tyr Leu Pro Tyr Asp Gly Gly Gly Asp
91 1 5 10 15
92 Asn Ile Pro Leu Arg Glu Leu His Lys Arg Gly Thr His Tyr Thr Met
93 20 25 30
94 Thr Asn Gly Gly Ser Ile Asn Ser Thr His Leu Leu Asp Leu Leu
95 35 40 45
96 Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr Asp Asp Phe His Thr Ile
97 50 55 60
98 Asp Trp Val Arg Glu Lys Cys Lys Asp Arg Glu Arg His Arg Arg Ile
99 65 70 75 80
100 Asn Ser Lys Lys Lys Glu Ser Ala Trp Glu Met Thr Lys Ser Leu Tyr
101 85 90 95

```

RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

```

102 Asp Ala Trp Ser Gly Trp Leu Val Val Thr Leu Thr Gly Leu Ala Ser
103      100      105      110
104 Gly Ala Leu Ala Gly Leu Ile Asp Ile Ala Ala Asp Trp Met Thr Asp
105      115      120      125
106 Leu Lys Glu Gly Ile Cys Leu Ser Ala Leu Trp Tyr Asn His Glu Gln
107      130      135      140
108 Cys Cys Trp Gly Ser Asn Glu Thr Thr Phe Glu Glu Arg Asp Lys Cys
109 145      150      155      160
110 Pro Gln Trp Lys Thr Trp Ala Glu Leu Ile Ile Gly Gln Ala Glu Gly
111      165      170      175
112 Pro Gly Ser Tyr Ile Met Asn Tyr Ile Met Tyr Ile Phe Trp Ala Leu
113      180      185      190
114 Ser Phe Ala Phe Leu Ala Val Ser Leu Val Lys Val Phe Ala Pro Tyr
115      195      200      205
116 Ala Cys Gly Ser Gly Ile Pro Glu Ile Lys Thr Ile Leu Ser Gly Phe
117      210      215      220
118 Ile Ile Arg Gly Tyr Leu Gly Lys Trp Thr Leu Met Ile Lys Thr Ile
119 225      230      235      240
120 Thr Leu Val Leu Ala Val Ala Ser Gly Leu Ser Leu Gly Lys Glu Gly
121      245      250      255
122 Pro Leu Val His Val Ala Cys Cys Cys Gly Asn Ile Phe Ser Tyr Leu
123      260      265      270
124 Phe Pro Lys Tyr Ser Thr Asn Glu Ala Lys Lys Arg Glu Val Leu Ser
125      275      280      285
126 Ala Ala Ser Ala Ala Gly Val Ser Val Ala Phe Gly Ala Pro Ile Gly
127      290      295      300
128 Gly Val Leu Phe Ser Leu Glu Glu Val Ser Tyr Tyr Phe Pro Leu Lys
129 305      310      315      320
130 Thr Leu Trp Arg Ser Phe Phe Ala Ala Leu Val Ala Ala Phe Val Leu
131      325      330      335
132 Arg Ser Ile Asn Pro Phe Gly Asn Ser Arg Leu Val Leu Phe Tyr Val
133      340      345      350
134 Glu Tyr His Thr Pro Trp Tyr Leu Phe Glu Leu Phe Pro Phe Ile Leu
135      355      360      365
136 Leu Gly Val Phe Gly Gly Leu Trp Gly Ala Phe Phe Ile Arg Ala Asn
137      370      375      380
138 Ile Ala Trp Cys Arg Arg Arg Lys Ser Thr Lys Phe Gly Lys Tyr Pro
139 385      390      395      400
140 Val Leu Glu Val Ile Ile Val Ala Ala Ile Thr Ala Val Ile Ala Phe
141      405      410      415
142 Pro Asn Pro Tyr Thr Arg Leu Asn Thr Ser Glu Leu Ile Lys Glu Leu
143      420      425      430
144 Phe Thr Asp Cys Gly Pro Leu Glu Ser Ser Ser Leu Cys Asp Tyr Arg
145      435      440      445
146 Asn Asp Met Asn Ala Ser Lys Ile Val Asp Asp Ile Pro Asp Arg Pro
147      450      455      460
148 Ala Gly Ile Gly Val Tyr Ser Ala Ile Trp Gln Leu Cys Leu Ala Leu
149 465      470      475      480
150 Ile Phe Lys Ile Ile Met Thr Val Phe Thr Phe Gly Ile Lys Val Pro

```

RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

```

151                               485                               490                               495
152 Ser Gly Leu Phe Ile Pro Ser Met Ala Ile Gly Ala Ile Ala Gly Arg
153                               500                               505                               510
154 Ile Val Gly Ile Ala Val Glu Gln Leu Ala Tyr Tyr His His Asp Trp
155                               515                               520                               525
156 Phe Ile Phe Lys Glu Trp Cys Glu Val Gly Ala Asp Cys Ile Thr Pro
157                               530                               535                               540
158 Gly Leu Tyr Ala Met Val Gly Ala Ala Ala Cys Leu Gly Gly Val Thr
159 545                               550                               555                               560
160 Arg Met Thr Val Ser Leu Val Val Ile Val Phe Glu Leu Thr Gly Gly
161                               565                               570                               575
162 Leu Glu Tyr Ile Val Pro Leu Met Ala Ala Val Met Thr Ser Lys Trp
163                               580                               585                               590
164 Val Gly Asp Ala Phe Gly Arg Glu Gly Ile Tyr Glu Ala His Ile Arg
165                               595                               600                               605
166 Leu Asn Gly Tyr Pro Phe Leu Asp Ala Lys Glu Glu Phe Thr His Thr
167                               610                               615                               620
168 Thr Leu Ala Ala Asp Val Met Arg Pro Arg Arg Asn Asp Pro Pro Leu
169 625                               630                               635                               640
170 Ala Val Leu Thr Gln Asp Asn Met Thr Val Asp Asp Ile Glu Asn Met
171                               645                               650                               655
172 Ile Asn Glu Thr Ser Tyr Asn Gly Phe Pro Val Ile Met Ser Lys Glu
173                               660                               665                               670
174 Ser Gln Arg Leu Val Gly Phe Ala Leu Arg Arg Asp Leu Thr Ile Ala
175                               675                               680                               685
176 Ile Glu Ser Ala Arg Lys Lys Gln Glu Gly Ile Val Gly Ser Ser Arg
177                               690                               695                               700
178 Val Cys Phe Ala Gln His Thr Pro Ser Leu Pro Ala Glu Ser Pro Arg
179 705                               710                               715                               720
180 Pro Leu Lys Leu Arg Ser Ile Leu Asp Met Ser Pro Phe Thr Val Thr
181                               725                               730                               735
182 Asp His Thr Pro Met Glu Ile Val Val Asp Ile Phe Arg Lys Leu Gly
183                               740                               745                               750
184 Leu Arg Gln Cys Leu Val Thr His Asn Gly Arg Leu Leu Gly Ile Ile
185                               755                               760                               765
186 Thr Lys Lys Asp Ile Leu Arg His Met Ala Gln Thr Ala Asn Gln Asp
187                               770                               775                               780
188 Pro Ala Ser Ile Met Phe Asn
189 785                               790
192 <210> SEQ ID NO: 3
193 <211> LENGTH: 65359
194 <212> TYPE: DNA
195 <213> ORGANISM: Homo sapiens
197 <220> FEATURE:
198 <221> NAME/KEY: misc_feature
199 <222> LOCATION: (1)...(65359)
200 <223> OTHER INFORMATION: n = A,T,C or G
202 <400> SEQUENCE: 3
203 aattctatac aaatataatt atatagatat atattacata tacacacaat tgtttatctt 60

```

RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

```

204 taaaaataat tcaaataatg ctacaaaact tttaacaatat gaagcattgt cagtattttat 120
205 tttaccggga ggatttcccc catcagtgag tgctgactgt cattttcatt ctttatgatac 180
206 aagttgtaga tcaggaaaaa caagttaaga gagtgcctac aaataccggg aaaacttgtg 240
207 gatagatttt cattttttat gttaaagacat ataagaacat gaatggtata aaaacaaaat 300
208 cttttataaa tgccatacaa ttatatattt agaaaaatta tatggtggta aaacatataa 360
209 aagaaccaca cactcccaaa tttaacattga gctaatttag tacagtttagc ctttgtcaaa 420
210 gctttccttg tttaaaaaaa ctattggctc agtgtgcagg aaggagcata ggagaaaaaa 480
211 ttgccaagaa tatttgaaaa atacagaaaa taaagaaaaa aatcacctac tatcctatca 540
212 aaaattttta tagctagaat caggataaga tagaatattc ctgtggcagt aattctagtc 600
213 tatattcctt tcctggaacc ctgtctccca aatttcagggt gagattttat aagaagctct 660
214 gtttatctga gattttaaatt ataaaaactt gatttaacct atacagtttt ttaaaaagac 720
215 cctaaataag taaaatttag tactccacaa attgaagaga atttctctct tctctttact 780
216 gccctctgag ttttctcttt ctttctctca cctccaattt tcatgtaaac actttcagtt 840
217 cgagtggacc tttagagattg tctcattcaa tacttttagga aaacaaattt tatagaaccc 900
218 ttgagttctg tgggaattgct tctaataaac aacacctttt gttgttggtg ttgttttagtg 960
219 acactgtgta acaggcattt caggaggaga atctcccagt ctagaggaat cctctcagag 1020
220 gtagctataa aatattgaac tctgatcttc aataagcatt gtgcggtttt tgtttttgtt 1080
221 tttaatgaca gttttaaaca agaaagtgtc tttatttctg aacttcataa aaatttctat 1140
222 taaagagaca atttctgaat ttataacaa tttctagaac agttgagtac ctcactttga 1200
223 gacacatttt tgctaaaagt taaaaacaca aaacccttat gagataaaat aggaagctag 1260
224 tagagatagg aaagtccctt gcttagtaaa cctctttttt gcgtagttta gacacataca 1320
225 atagtaaagt tacttagtac gttgatagtt ttctttctcc tcaaaagcta caatgtctta 1380
226 ctagctagtt ctttcaagaa aggaaacaag aagccgctgg aggagattgg tgagtgggat 1440
227 aaaacactat tcaactcttc agttattcgg tttttaaatc ctcaatgaaa ggctgctgta 1500
228 tttagagta tttttttttt atttttaata gacttagaac caagtttctt gagaaacctt 1560
229 tggcatattg tagttttttt atggctatga ctcacatgac attactgtat aaaactagta 1620
230 cattctctcg taaaaccaca caaacttact agagtgtctg tctcattttt ctacattaga 1680
231 aatgaaaaag ggcattgtct gcattcaaaa tttccttttt acatctctgt attacttttt 1740
232 cccctttata tttatcttaa aaccaaaaga aataatgttt ctattgtttt actgtagtta 1800
233 ccactgatgc taccgaagct gtattgtgag tgtttcaaaa ttctcaaacc agttttgtgt 1860
234 gttgtacttg gagcttagtc attgtcatac gtagcaggac ctgattaaga aggctgtgcc 1920
235 gcctctaagc cttgctagat ttagccact agcaaccagg ctgcaataat ttccctttga 1980
236 tgacatcatc cactgtggaa gaaccagtt gcttcagcga gtcgaactac agttttaacc 2040
237 tcatcaaata tggcatctcc cttgcttgct gcagcaggga tggaaagaaat gtcactttct 2100
238 ttttaagcta gcaagctttt tctttttctt tttcttcttc tatttaaaaa ttctaatacat 2160
239 ggatgcttct tccgaccctt atttgcctta tgacggggga ggagacaata ttcccctgag 2220
240 ggaattacat aaaagaggta atactatccc cttgctgtga attctctgtt ggtatgtttt 2280
241 gcatgcggct gggcggtcct ctagcttaaa ctggttctcg tttgtccttt aaatactgca 2340
242 gtacgttgtt tagttgccct gggttgtag taaggggaaa atgcaacctt ctgaatggtt 2400
243 gtgtagccat ccctgattgt tttctctgtg cagattagta ctgcttcaga tcacgtcggg 2460
244 ctccgactcc atcttctgca tgaaaatctt ctttctaact ctgaaaatga attaactctg 2520
245 ttttacagcc aactaaagtc gtgttggtg gcattctaaa agtaaatgtt ttcttccttc 2580
246 agaaaaacta catttccttt catttacaca gagaaatcag gtgcctatgt accattatat 2640
247 tttagctgct gccaatatcc atgtagattt tacaccacaa agtaaaattt tagcaaaagc 2700
248 tttacctaca ttttagaaca ttttaaaatg atagtaaaga tgaataattt ctatattaat 2760
249 actttttatt taatatgtat ttcggctgag taacatacta cattgtcttc cacaggatct 2820
250 ttgtgaaatt tgatatgata aaacacattt gactaaatgt cagaaaaaat aatattgggt 2880
251 tgtgaaaagc agaagagcac ccagcatgcc tgtaaatctt ttggcaggca cttcctcagt 2940
252 ctccttaaaa ttaattgcat gtttaattact accctttttt tcatttttgt ttaattgctt 3000

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/804,472A

DATE: 11/07/2003
TIME: 14:22:04

Input Set : A:\1163 REV SEQLIST.TXT
Output Set: N:\CRF4\11062003\I804472A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 4885,4886,4887,4888,4889,4890,4891,4892,4893,4894,4895,4896
Seq#:3; N Pos. 4897,4898,4899,4900,4901,4902,4903,4904,4905,4906,4907,4908
Seq#:3; N Pos. 4909,4910,4911,4912,4913,4914,4915,4916,4917,4918,4919,4920
Seq#:3; N Pos. 4921,4922,4923,4924,4925,4926,4927,4928,4929,4930,4931,4932
Seq#:3; N Pos. 4933,4934,4935,4936,4937,4938,4939,4940,4941,4942,4943,4944
Seq#:3; N Pos. 4945,4946,4947,4948,4949,4950,4951,4952,4953,4954,4955,4956
Seq#:3; N Pos. 4957,4958,4959,4960,4961,4962,4963,4964,4965,4966,4967,4968
Seq#:3; N Pos. 4969,4970,4971,4972,4973,4974,4975,4976,4977,4978,4979,4980
Seq#:3; N Pos. 4981,4982,4983,4984,4985,4986,4987,4988,4989,4990,4991,4992
Seq#:3; N Pos. 4993,4994,4995,4996,4997,4998,4999,5000,5001,5002,5003,5004
Seq#:3; N Pos. 5005,5006,5007,5008,5009,5010,5011,5012,5013,5014,5015,5016
Seq#:3; N Pos. 5017,5018,5019,5020,5021,5022,5023,5024,5025,5026,5027,5028
Seq#:3; N Pos. 5029,5030,5031,5032,5033,5034,5035,5036,5037,5038,5039,5040
Seq#:3; N Pos. 5041,5042,5043,5044,5045,5046,5047,5048,5049,5050,5051,5052
Seq#:3; N Pos. 5053,5054,5055,5056,5057,5058,5059,5060,5061,5062,5063,5064
Seq#:3; N Pos. 5065,5066,5067,5068,5069,5070,5071,5072,5073,5074,5075,5076
Seq#:3; N Pos. 5077,5078,5079,5080,5081,5082,5083,5084,5085,5086,5087,5088
Seq#:3; N Pos. 5089,5090,5091,5092,5093,5094,5095,5096,5097,5098,5099,5100
Seq#:3; N Pos. 5101,5102,5103,5104,5105,5106,5107,5108,5109,5110,5111,5112
Seq#:3; N Pos. 5113,5114,5115,13137,13138,13139,13140,13141,13142,13143
Seq#:3; N Pos. 13144,13145,13146,13147,13148,13149,13150,13151,13152,13153
Seq#:3; N Pos. 13154,13155,13156,13157,13158,13159,13160,13161,13162,13163
Seq#:3; N Pos. 13164,13165,13166,13167,13168,13169,13170,13171,13172,13173
Seq#:3; N Pos. 13174,13175,13176,13177,13178,13179,13180,13181,13182,13183
Seq#:3; N Pos. 13184,13185,13186,13187,13188,13189,13190,13191,13192,13193
Seq#:3; N Pos. 13194,13195,13196,13197,13198,13199,13200,13201,13202,13203
Seq#:3; N Pos. 13204,13205,13206,13207,13208,13209,13210,13211,13212,13213
Seq#:3; N Pos. 13214,13215,13216,13217,13218,13219,13220,13221,13222,13223
Seq#:3; N Pos. 13224,13225,13226,13227,13228,13229,13230,13231,13232,13233
Seq#:3; N Pos. 13234,13235,13236,13237,13238,13239,13240,13241,13242,13243
Seq#:3; N Pos. 13244,13245,13246,13247,13248,13249,13250,13251,13252,13253
Seq#:3; N Pos. 13254,13255,13256,13257,13258,13259,13260,13261,13262,13263
Seq#:3; N Pos. 13264,13265,13266,13267,13268,13269,13270,13271,13272,13273
Seq#:3; N Pos. 13274,13275,13276,13277,13278,13279,13280,13281,13282,13283
Seq#:3; N Pos. 13284,13285,13286,13287,13288,13289,13290,13291,13292,13293
Seq#:3; N Pos. 13294,13295,13296,13297,13298,13299,13300,13301,13302,13303
Seq#:3; N Pos. 13304,13305,13306,13307,13308,13309,13310,13311,13312,13313
Seq#:3; N Pos. 13314,13315,13316,13317,13318,13319,13320,13321,13322,13323
Seq#:3; N Pos. 13324,13325,13326,13327,13328,13329,13330,13331,13332,13333
Seq#:3; N Pos. 13334,13335,13336,13337,13338,13339,13340,13341,13342,13343
Seq#:3; N Pos. 13344,13345,13346,13347,13348,13349,13350,13351,13352,13353
Seq#:3; N Pos. 13354,13355,13356,13357,13358,13359,13360,13361,13362,13363
Seq#:3; N Pos. 13364,13365,13366,13367,13368,13369,13370,13371,13372,13373
Seq#:3; N Pos. 13374,13375,13376,13377,13378,13379,13380,13381,13382,13383

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/07/2003
PATENT APPLICATION: **US/09/804,472A** TIME: 14:22:04

Input Set : **A:\1163 REV SEQLIST.TXT**
Output Set: **N:\CRF4\11062003\I804472A.raw**

Seq#:3; N Pos. 13384,13385,13386,13387,13388,13389,13390,13391,13392,13393
Seq#:3; N Pos. 13394,13395,13396,13397,13398,13399,13400,13401,13402,13403
Seq#:3; N Pos. 13404,13405,13406,13407,13408,13409,13410,13411,13412,13413
Seq#:3; N Pos. 13414,13415,13416,13417,13418,13419,13420,13421,13422,13423
Seq#:3; N Pos. 13424,13425,13426,13427,13428,13429,13430,13431,13432,13433
Seq#:3; N Pos. 13434,13435,13436,13437,13438,13439,13440,13441,13442,13443
Seq#:3; N Pos. 13444,13445,13446,13447,13448,13449,13450,13451,13452,13453

VERIFICATION SUMMARY

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:04

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:4860

M:341 Repeated in SeqNo=3